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October 28, 2005

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Re: Title: THE ST-B17 SEROTONIN RECEPTOR
Letters Patent No. 6,844,190
Issued: January 18, 2005
Our Reference No.: NIH047.1CP1C1

**Certificate
of Correction**
NOV 04 2005

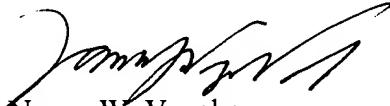
Dear Sir:

Enclosed for filing is a Certificate of Correction in connection with the above-identified patent and a red-lined version of the applicable grant pages.

As not all of the errors cited in the Certificate of Correction were incurred through the fault of the Patent Office, but the Applicant, enclosed is our check in the amount of \$100. Please charge any additional fees to our Deposit Account No. 11-1410.

Respectfully submitted,

Knobbe, Martens, Olson & Bear, LLP



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Enclosures

1940046: clk:vb
091905

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UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 6,844,190 *β2*

DATED : January 18, 2005

INVENTOR(S): Sibley et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

On page 1, column 1 (Assignee), lines 1-3, please delete "The United States of America as represented by the Department of Health and Human Services" and insert --The Government of the United States of America, as represented by the Secretary, Department of Health and Human Services--, therefore.

At column 35, line 51, in Claim 1, please delete "secquence" and insert --sequence--, therefore.

At column 35, line 55, in Claim 1 (c), after "sequence" and before "from a human genomic library" please insert --obtainable--.

At column 35, line 58 (Approximate), in Claim 1, please delete "6xSSC" and insert --6XSSC--, therefore.

At column 36, line 54 (Approximate), in Claim 6, please delete "propoter" and insert --promoter--, therefore.

At column 36, line 58 (Approximate), in Claim 9, please delete "nude tide" and insert --nucleotide--, therefore.

MAILING ADDRESS OF SENDER:

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PATENT NO. 6,844,190

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(12) **United States Patent**
Sibley et al.

(10) Patent No.: **US 6,844,190 B2**
(45) Date of Patent: **Jan. 18, 2005**

(54) **ST-B17 SEROTONIN RECEPTOR**

(75) Inventors: **David R. Sibley, Gaithersburg, MD (US); Frederick J. Monsma, Jr., Richen (CH); Mark Hamblin, Seattle, WA (US)**

(73) Assignee: **The United States of America as 1
represented by the Department of 2
Health and Human Services 3**
Washington, DC (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **09/829,631**

(22) Filed: **Apr. 10, 2001**

(65) **Prior Publication Data**

US 2002/0091235 A1 Jul. 11, 2002

Related U.S. Application Data

(63) Continuation-in-part of application No. 08/428,242, filed as application No. PCT/US93/10296 on Oct. 26, 1993, now abandoned, which is a continuation of application No. 07/970,338, filed on Oct. 26, 1992, now abandoned.

(51) Int. Cl. ⁷ **C12N 5/00; C12N 15/00;
C12Q 1/68; C07K 14/435**

(52) U.S. Cl. **435/325; 435/6; 435/69.1;
435/320.1; 536/23.5; 530/350**

(58) Field of Search **536/23.5; 435/6,
435/69.1, 320.1, 325; 530/350**

(56) **References Cited**

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Ruat, M., et al., A novel rat serotonin (5-HT₆) receptor molecular cloning, localization and stimulation of cAMP accumulation, BBRC. 1993, vol. 193(1), pp. 268-276.

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(57) **ABSTRACT**

Genes encoding the St-B17 serotonin receptor protein were cloned and characterized from a rat striatum mRNA and a human genomic library. The St-B17 receptor has nucleotide and amino acid homology with previously described 5-HT genes and can bind ligands that are known to interact with serotonin receptors. In addition, the levels of intracellular cAMP in cells transfected with the receptor gene respond in a dose dependent manner to introduction of serotonin in the media.

12 Claims, 5 Drawing Sheets

-continued

145	150	155	160
Leu	Leu	Leu	Gly
Trp	His	Glu	Leu
165	170	175	
Gly	Gln	Cys	Arg
Leu	Leu	Leu	Ala
180	185	190	Ser
Gly	Leu	Thr	Phe
195	200	205	Phe
Arg	Ile	Leu	Leu
210	215	220	Ala
Thr	Thr	Gly	Met
225	230	235	Ala
Ser	Pro	Gln	Gly
245	250	255	Val
Lys	Ser	Ser	Ala
260	265	270	Gly
Leu	Gly	Met	Phe
275	280	285	Phe
Val	Gln	Ala	Val
290	295	300	Cys
Thr	Trp	Leu	Gly
305	310	315	Tyr
Leu	Phe	Asp	Met
325	330	335	Leu
Pro	Arg	Cys	Pro
340	345	350	Arg
Ala	Pro	Leu	Thr
355	360	365	Ala
Cys	Arg	Cys	Pro
370	375	380	Arg
Gln	Ala	Ala	Pro
385	390	395	Arg
Ala	Arg	Pro	Pro
405	410	415	Arg
Ser	Ile	Ser	Ser
420	425	430	Thr
Pro	Leu	Gly	Ile
435			Pro
			Thr
			Asn

What is claimed is:

1. An isolated nucleotide sequence 1 coding a serotonin receptor protein 5-HT₆, said nucleotide sequence being selected from:
 - (a) a nucleotide sequence comprising SEQ ID NO:7;
 - (b) a nucleotide sequence comprising SEQ ID NO:12;
 - (c) a nucleotide sequence from a human genomic library hybridizing under moderate stringency conditions at 6xSSC 3rd 55° C., pH7, to a 1192 bp XmaI-BstXI and a 655 bp BamHI-EagI fragment from SEQ ID NO:7; or
 - (d) a nucleotide sequence encoding a protein having the amino acid sequence shown by SEQ ID NO:8 or SEQ ID NO: 13.
2. The nucleotide sequence according to claim 1, wherein said nucleotide sequence is selected from (a).
3. The nucleotide sequence according to claim 1, wherein said nucleotide sequence is selected from (b).
4. The nucleotide sequence according to claim 1, wherein said nucleotide sequence is selected from (c).

5. The nucleotide sequence according to claim 1, wherein said nucleotide sequence is selected from (d).
6. A recombinant construct comprising the nucleotide sequence according to claim 1, operably linked to a heterologous promoter 2.
7. The recombinant construct according to claim 6, which is an expression vector.
8. The recombinant construct according to claim 7, which is a eukaryotic expression vector.
9. A mammalian cell line comprising the nude 3 sequence of claim 1, said mammalian cell line expressing 5-HT₆ serotonin receptor.
10. The cell line of claim 9, wherein said cells are derived from a human.
11. The cell line of claim 10, wherein said cells are HEK 293.
12. An isolated protein encoded by the nucleotide sequence of any of claims 1-5.

* * * * *

obtainable